AMENDMENTS IN THE ABSTRACT:

A data recording method according to the present invention is a method for recording data as edge position information, including marks and spaces of multiple different lengths, on a storage medium by irradiating the storage medium with a pulsed energy beam. The method includes the steps of: (A) generating a ~~write code sequence~~ NRZI data based on the data to be recorded; (B) determining a write pulse waveform, defining the power modulation of the energy beam, according to the code lengths of respective codes included in the ~~write code sequence~~ NRZI data; and (C) modulating the power of the energy beam based on the write pulse waveform. If the shortest code length of the ~~write code sequence~~ NRZI data is n (which is an integer equal to or greater than one), a write pulse waveform that has only one write pulse is assigned to recording mark making periods corresponding to codes with code lengths x of n, n+1 and n+2, and a write pulse waveform that has multiple write pulses Pw is assigned to recording mark making periods corresponding to codes with code lengths x of n+3 or more.